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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GORDON, BRIAN R

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 04/11/2002

14

Please find below and/or attached an Office communication concerning this application or proceeding.

1-P-14

Office Action Summary

Application No.

09/420,965

Applicant(s)

HEATH ET AL.

Examiner

Brian R. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 January 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on January 22, 2002 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

2. In light of the amendment, the objections to the drawings are hereby withdrawn.

Response to Arguments

3. In light of the amendment the 112 rejection of claims 1-12 is hereby withdrawn.

4. On page 4 "Remarks" of Paper No. 12, applicant states "claims 9-10 have been canceled", as it appears the examiner as deduced that this is an error and applicant's intentions were to cancel claims 10-11.

5. Applicant's arguments filed January 22, 2002 have been fully considered but they are not persuasive. Applicant submits that Laguana Valderrama does not mention that the cap is secured when the flanges are aligned. The examiner hereby asserts that such a limitation is inherent from the disclosure of Laguana Valderrama, for Valderrama states "The neck 5 of the flask 1 has a thread 9 on the outside, as well as flange 10 beside its mouth, both corresponding threads 11 and peripheral flange 12 on the inside of cap 13." It is clear that the both the threads and flanges are aligned (corresponding) to seal (secure) the assembly to ensure that the contents do not escape.

6. As to applicant's arguments as addressed to the 103 rejections of claims 2-3 over Laguana Valderrama in view of Long Jr., the examiner hereby asserts that

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disjoined threads and continuous threads are both features of cap and vessel assemblies well known in the art. Applicant also discloses (specification page 12, lines 6-14) that the external threads as claimed in claims 2-3 are "conventional". The examiner asserts that it would have been obvious to one of the ordinary skill in the art to modify the device by employing the disjoined threaded formation of Long Jr., for it has been disclosed that both single and multiple threads are conventional and well-known in the art for providing a secure attachment of a cap to a vessel. As to the number of threads and the spacing on the cap, it has been disclosed (specification page 12) that "four-start" threads are also conventional and well known in the art. It is obvious that the spacing of the threads depends on the total number of the threads; therefore, if four threads are to be equally spaced around a 360 degrees perimeter, then each thread would obviously be spaced 90 degrees from an adjacent thread. Although Long Jr. discloses the use of 8 or 9 equally spaced threads, this does not preclude the use of a conventional "four-start" thread configuration to provide suitable closure means for a cap and vessel assembly. The examiner hereby asserts that the employment of a well-known, "conventional" thread format does not distinguish the claimed invention over the prior art. For the reasons given above the 103 rejection of 2-3 and 12 are hereby maintained.

7. As to applicant's arguments as addressed to the 103 rejection of claims 1-12 and 18-22 over Burns in view of Long Jr., the examiner respectfully disagrees with applicant and hereby maintains the rejection. As applicant has admitted the device of Burns includes a "snap-lock engagement" and the device of Long Jr. comprises a screw-on or

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a snap-on cap, the examiner asserts that the modification of the device of Burns by employing the conventional thread structure of Long Jr. would not be substantial or exclude any of the features or limitations as claimed by Burns. Upon modification the threads would not be damaged or prevent the "snap-lock" engagement of protrusion 33 (of Burns) with that of the annular integral sealing ring 32. The success of such a modification is clearly supported in the disclosure of Long Jr. in column 3, lines 57-67:

"Helically extending between first end 14 and the second end 16 of the annular wall 12 are an appropriate number of threads to permit snap-on or screw-on application, preferably eight or nine threads 24 terminating at points 26 and 27 proximate to the first end 14 and second end 16 of annular wall 12, respectively. Preferably, threads 24 are helically spaced in a continuous relationship as shown in FIG. 1 but threads 24 can alternately be discontinuous and can take on any cross-sectional profile suitable for mating with threads 43 on the closure 30 during snap and screw-on application of the closure 30 to the neck finish 10."

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by

Laguamna Valderrama, US 5,811,060.

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Laguana Valderrama discloses a flask 1 that has thread 9 on the outside as well as flange 10. The flask can be secured with cap 13 that comprises threads 11 and flange 12.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laguana Valderrama in view of Long Jr. US 6,059,134.

Laguana Valderrama does not disclose that the vessel and cap have multiple disjointed threads.

Long Jr. discloses a screw-off closure and container that have multiple discontinuous mating threads. As it appears in the figures each thread extends about 180 degrees around the vessel neck and each thread starts in a location about 90 degrees away from an adjacent thread. The device is manufactured from plastic and more preferably a high density plastic suitable for blow molding of the thread finish. The molding process makes it obvious that the design and location of the threads may be altered as so desired.

The examiner asserts that it would have been obvious to one of the ordinary skill in the art to modify the device by employing the disjointed threaded formation of Long Jr., for it has been disclosed that both single and multiple threads are conventional and well-known in the art for providing a secure attachment of a cap to a vessel. As to the number of threads and the spacing on the cap, it has been disclosed (specification page 12 and cited references, Folchini, Collins, Edwards, and Edwards et al.) that "four-start" threads are also conventional and well known in the art. It is obvious that the spacing of the threads depends on the total number of the threads; therefore, if four threads are to be equally spaced around a 360 degrees perimeter, then each thread would obviously be spaced 90 degrees from an adjacent thread. Although Long Jr. discloses the use of 8 or 9 equally spaced threads, this does not preclude the use of a conventional "four-start" thread configuration to provide suitable closure means for a cap and vessel assembly. The examiner hereby asserts that the employment of a well-known, "conventional" thread format does not distinguish the claimed invention over the prior art.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the device of Laguana Valderrama to include the principles of Long Jr. et al. in order to develop a closure that would indicate tampering of the seal.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laguana Valderrama in view of Long as applied to claims 2-3 above, and further in view of Burns US 5,288,466.

The modified teachings of Valderrama do not specifically recite the molded material is polypropylene.

Burns discloses a microcollection assembly that is made of a clear molded thermoplastic material such as polyethylene, polypropylene, and polyvinyl chloride, which may be made to be hydrophilic.

It would have been obvious to one of the ordinary skill in the art to further modify the teachings of Valderrama to include the teachings of Burns in order to manufacture a hydrophilic cap and container.

13. Claims 1-9, 12 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns in view of Long Jr.

Burns discloses a microcollection assembly that is made of a clear molded thermoplastic material such as polyethylene, polypropylene, and polyvinyl chloride, which may be made to be hydrophilic.

The microcollection assembly comprises a cap 54 that includes annular flange 61 that aligns with flange 55 that is formed on the outer surface of the container 52.

Burns does not disclose that the cap and container have disjointed threads.

Long Jr. discloses a snap-on, screw-off closure and container that have multiple discontinuous mating threads. As it appears in the figures each thread extends about 180 degrees around the vessel neck and each thread starts in a location about 90 degrees away from an adjacent thread. The device is manufactured from plastic and more preferably a high density plastic suitable for blow molding of the thread finish. The

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molding process makes it obvious that the design and location of the threads may be altered as so desired.

Helically extending between first end 14 and the second end 16 of the annular wall 12 are an appropriate number of threads to permit snap-on or screw-on application, preferably eight or nine threads 24 terminating at points 26 and 27 proximate to the first end 14 and second end 16 of annular wall 12, respectively. Preferably, threads 24 are helically spaced in a continuous relationship as shown in FIG. 1 but threads 24 can alternately be discontinuous and can take on any cross-sectional profile suitable for mating with threads 43 on the closure 30 during snap and screw-on application of the closure 30 to the neck finish 10 (column 3, lines 57-67).

It would have been obvious that if the threads of the cap and vessel are manufactured to a certain same length the securing of the vessel will be accomplished when the cap is turned in the direction of applying the cap that certain distance and removing the cap would occur when the cap is turned in the opposite direction that same certain length.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the device of Burns to include the principles of Long Jr. et al in order develop a closure which would indicate tampering of the seal.

As to claims 4 and 5, it would have also been obvious to manufacture the assembly to include flanges of any shape in the molding process.

As to the method claims 18-22, it would have been obvious that one of the ordinary skill in the art would have recognized that the caps are secured onto the

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container by placing the cap on the opening and turning the cap in a given direction and removing the cap to remove the contents can be accomplished by turning the cap in the opposite direction and the method can be repeated as so desired.

Conclusion


14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Folchini, Edwards, Collins, and Edwards et al., disclose cap and vessel assemblies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is (703) 305-0399. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7719 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

brg
April 5, 2002


Jill Warden
Supervisory Patent Examiner
Technology Center 1700